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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HUNG, YUBIN	
			ART UNIT 2624	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/797,129

**Applicant(s)**

NOMIZU, YASUYUKI

**Examiner**

Yubin Hung

**Art Unit**

2624

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-15 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-15 and 20-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/19/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment/Arguments***

1. This action is in response to amendment filed 12/18/07, which has been entered.
2. Claims 3 and 16-19 have been canceled and 30-31 added. Currently claims 1, 2, 4-15 and 20-31 are still pending.
3. In view of Applicant's amendment, the 35 USC § 101 rejections of claims 12-15 have been withdrawn.
4. In view of Applicant's amendment, the 35 USC § 112 rejections have been withdrawn. However, the amendment introduces new 35 USC § 112 rejections. See below.
5. Applicant's amendment has rendered moot the 35 USC § 102 and 103 rejections of all remaining claims. However, upon further consideration, a new ground(s) of rejection is made.
6. Regarding amended claim 1 (and similarly amended independent claims 7, 12, 20 and 24), Applicant argues (see PP. 14-16, especially P. 14, last paragraph-P. 15, 2<sup>nd</sup> paragraph) that Delean (previously applied to the rejection of canceled claim 3) fails to teach or suggest the new limitation (that is, the editing part).

However, this argument is not persuasive because Delean teaches an editing part [Fig. 3, refs. 100-118; Fig. 4 (note that FIS program 118 is executed in CPU 112)] configured to

- Perform editing operation on a non-reversible code image obtained from decoding the non-reversible code

[Fig. 4, ref. 208; Col. 7, lines 19-32 (note that the editing is applied to the image in the IVUE file, either full or compressed); Col. 9, lines 34-56, especially lines 54-56 (note that since the editing is applied to the image, the lossily, or non-reversibly, compressed image necessarily needs to be decompressed first, i.e., to obtain a "non-reversible code image")]

- Store the editing operation

[Col. 7, lines 30-47 (note that the FITS file store the editing operation)]

- Apply the editing operation to the reversible code

[Fig. 4, ref. 212. Note that (1) Col. 7, lines 48-59 discloses that to produce a single output image the edit operation is applied to the original image (which can be obtained from a reversible code of that image, as per the definition of "reversible"); (2) Col. 9, lines 43-45 discloses that the original image can be losslessly (i.e., reversibly) compressed; and (3) Col. 9, lines 48-53 discloses the advantages of using a compressed file (namely to lower storage requirement and transmission time). Therefore it would have been obvious to apply editing operation to the reversible code because per (3) losslessly compressing the

original image (to generate reversible code of the image) has several advantages and, as already indicated, the original image can be obtained from decoding the reversible code]

### ***Specification***

7. Claims 1, 7, 12, 20 and 24 are objected to because of the following informalities:

- Claim 1
  - Lines 14-16: for clarity consider changing both instances of "or non-reversible" to "or the non-reversible"
  - line 18: for consistency consider changing "the image" to "an image"
- Claim 7
  - lines 15-17 and 20: for clarity consider changing all four instances of "or non-reversible" to "or the non-reversible"
  - Last line: the last "reversible code" appears to be redundant since there does not appear to be any difference between "the reversible code image ... in a form of the reversible code generated" (see the last two lines) and "the reversible code". [Comment: It appears that claim 7 is an apparatus claim of claim 1. Therefore it appears appropriate to rewrite the selecting part (the last three lines of the claim) in the same manner as that of claim 1 (the last three lines).]
- Claim 12

- line 12: for clarity consider changing "or non-reversible" to "or the non-reversible"
- line 13: for consistency consider changing "the image" to "an image"
- Claim 20
  - line 10: for clarity consider changing "or non-reversible" to "or the non-reversible"
  - line 11: for consistency consider changing "the non-reversible" to "a non-reversible"
- Claim 24
  - line 12: for clarity consider changing "or non-reversible" to "or the non-reversible"
  - line 13: for consistency consider changing "the non-reversible" to "a non-reversible"

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1, 2, 4-15 and 20-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

10. Specifically, claim 1 recites "apply the editing operation to the reversible code" in line 13. However, per lines 11-12 of amended claim 1 as well as Fig. 5 and P. 28, line 14-P. 30, line 16 (especially lines 11-20 of page 29 and lines 4-16 on page 30) of the specification of instance application, editing and modification are applied to the decoded images, not the code itself. Note also that in the original claim 3 (now canceled) editing or modifying operations are also performed on image data, not the code. Claims 7 (line 14), 12 (line 11), 20 (line 9) and 24 (line 11) have the same problem and their respective dependent claims 2, 4-6, 8-11, 13-15 and 20-23 and 25-31 inherit the same problem and therefore all are similarly rejected. [Note: for examination purpose "the reversible code" will be interpreted as "the image obtained from decoding the reversible code."]

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 7-11, 14, 22, 26 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 7, and similarly its dependent claims 8-11, recites the limitation "the reversible code image" in line 9. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 9 recites the limitation "the image data" in line 4 and the last line. There is insufficient antecedent basis for this limitation in the claim.

15. Claims 14 and 22 recite the limitation "the image data" in their respective last two lines and claim 26 recites the same in its last line. There is insufficient antecedent basis for this limitation in the claim.

16. Claim 31 recites the limitation "the portion" in the last line. There is insufficient antecedent basis for this limitation in the claim



***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 1, 2, 4-15 and 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatae et al. (US 2003/0193948), and further in view of Fukuhara et al. (US 7,127,111), Long (US 5,768,424) and Delean (US 5,907,640).

19. Regarding claim 1, and similarly claims 20 and 24, Hatae discloses a client apparatus connected with a communication network [Fig. 2, ref. 28; paragraphs 100-113] including

- a storing part  
[Fig. 2: refs. 38 & 40; P. 4, paragraph 95, lines 16-20]
- a transmission part configured to transmit either the reversible or non-reversible code, or an image obtained from decoding the reversible code or non-reversible code, to a predetermined transmission destination  
[Fig. 2, ref. 44 (transmitter); P. 4, paragraph 95, lines 23-25; P. 5, paragraph 113]
- a selecting part configured to selectively perform transmission of the non-reversible code or the reversible code, or the image obtained from decoding the reversible code or non-reversible code  
[Fig. 2, refs. 38-42; P. 4, paragraph 95, lines 16-21; P. 5, paragraph 112, lines 1-4]

Hatae does not expressly disclose

- (that the stored code) is obtained by reversibly compressing and coding an original image according to a predetermined coding algorithm having a hierarchy configuration from a reversible part through a non-reversible part
- an altering part configured to generate, from the reversible code, a non-reversible code
- an editing part configured to perform an editing operation on a non-reversible code image obtained from decoding the non-reversible code, to store the editing operation, and to apply the editing operation to the reversible code

However, Fukuhara discloses generating reversibly compressed code in the manner recited above using JPEG 2000 [Fig. 1; Col. 4, line 26-Col. 7, line 56] and Long further discloses generating non-reversible code from the code [Fig. 7, refs. 23 & 24 (generating non-reversible code); Fig. 10 (detailing the process of Fig. 7, ref. 24); Col. 4, lines 25-55]. Additionally, per the discussion in paragraph 6 above, Delean teaches the editing part recited above.

It would therefore have been obvious to one of ordinary skill in the art to modify Hatae with the teachings of Fukuhara, Long and Delean as recited above to obtain the invention as specified in claim 1. The reasons for doing so at least would have been to improve coding efficiency (Fukuhara: Col. 1, lines 36-41), to meet the minimum timing requirements of the output device such as printers or displays (Long: Abstract), as well as to be able to allow an output image to be exported to any one of many desktop publishing systems that are available and to give the ability to edit images that are resolution independent, among other thing, as Delean indicates in Col. 7, line 55-Col. 8, line 13.

20. Regarding claim 2, and similarly claims 10, 15, 23 and 25, note that Fukuhara discloses the use of JPEG 2000 [Fig. 1].

21. Regarding claim 7, and similarly claim 12, per the analysis of claim 1, the combined invention of Hatae, Fukuhara, Long and Delean discloses a coding part, a storing part, an altering part and a selecting part as recited.

In addition, Hatae further discloses

- a decoding part decoding the reversible code [Fig. 2, ref. 36 (both compress, or expand what has been compressed, whether reversible or not)]
- a printer engine performing image formation on a medium based on the reversible code image [Fig. 2, ref. 60]

22. Regarding claim 11, note that Hatae further discloses an image input device [Fig. 2, ref. 30; P. 5, paragraph 106] that reads data to be compressed by the coding part [Fig. 2, ref. 36].

23. Regarding claim 26, the combined invention does not expressly disclose the following:

- in said selectively performing transmission, the image data in a form of the non-reversible code is performed when, in the client apparatus, the image data is displayed with a use of the generated code transmitted, and therewith, operation of editing or modifying is performed on the image data

However, Delean teaches selecting lossily (i.e., non-reversibly) compressed for displaying and editing purpose [Fig. 4, refs. 204–208; Col. 7, lines 12-23; Col. 9, lines 54-56] and selecting image data that is not non-reversibly compressed for transmission to an external apparatus [Fig. 4, refs. 204, 214, 212 & 216; Col. 7, lines 48-59], as well as using lossless (i.e., reversible) compression [Col. 9, lines 34-337 & 43-45] and obtaining the highest quality image for the final output [Col. 9, lines 56-59] (these teach using reversible compression for the output file 216 since both high image quality and smaller file size are accomplished this way).

24. Regarding claim 4, and similarly claim 27, note that Delean further discloses

- the selecting part is configured to transmit the reversible code having information indicating the contents of operation of editing or modifying the image data attached thereto [Fig. 4, refs, 212 & 216; Col. 7, lines 48-59]

25. Regarding claim 5, and similarly claim 28, Delean further discloses

- a determining part configured to determine whether the contents of operation of editing or modifying for the image data are actually reflected on the image data in the form of reversible code or the original image by the own apparatus or by another external apparatus [Fig. 4, ref. 212; Col. 3, lines 33-38Col. 6, lines 48-54 and Col. 7, lines 55-58. Note that where the output image 216 is sent so that the editing operations can be executed (by a desk publishing system, either self or external) inherently has to be determined]
- the selecting part, when a determination is made by said determining part that the contents of operation of editing or modifying for the image data are actually reflected on the image data in the form of reversible code or the original image by another external apparatus, configured to transmit the reversible code having information indicating the contents of operation of editing or modifying the image data attached thereto [Fig. 4, refs, 212 & 216; Col. 7, lines 48-59; also per the analysis of claim 3 regarding the use of reversible code. Note that the output image 216 contains editing/modifying information]

26. Regarding claim 6, and similarly claim 29, Delean further discloses performing processing according to the received information indicating editing/modifying operations [Fig. 4, refs. 212 & 216; Col. 7, lines 55-58. Note that an external desk publishing system, considered a server, will carry out the editing/modifying operations].

27. Regarding claim 8, and similarly claims 13 and 21, Delean further discloses

- transmits the image data in the form of reversible code when the image data in the form of the reversible code is provided to the printer engine [Fig. 3, ref. 110; Fig. 4, ref. 212; Col. 5, lines 56-60; Col. 6, lines 10-12; Col. 7, lines 48-59 and Col. 9, lines 57-62]

28. Regarding claim 9, and similarly claims 14 and 22, Delean discloses sending non-reversible code to display [Fig. 3, ref. 108; Col. 3, lines 25-29; Col. 9, lines 53-55 (sending non-reversible code)].

29. Claim 30 is similarly analyzed and rejected as per the analyses of claim 7 (regarding the decoding part) and claim 1 (regarding the editing part).

>>><<<

30. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatae et al. (US 2003/0193948), Fukuhara et al. (US 7,127,111), Long (US 5,768,424) and Delean (US 5,907,640) as applied to claims 1, 2, 4-15 and 20-30 above, and further in view of Engeldrum et al. (US 2002/0003903).

31. Regarding claim 31, the combined invention of Hatae, Fukuhara, Long and Delean discloses all limitation of its parent claim 1 but not expressly the following

- a decoding part configured to decode less than all of the reversible code
- the editing part is configured to apply the editing operation to an image obtained from decoding the portion of the reversible code

However, Engeldrum discloses decoding only a part of a compressed image and editing only the decoded portion [Fig. 21, ref. 718 and paragraph 192, especially lines 4-7; note that Fukuhara discloses generating reversible code, per the analysis of claim 1; note also that color correction is a form of editing].

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention of Hatae, Fukuhara, Long and Delean with the teaching of Engeldrum as recited above to obtain the invention as specified in claim 31. The reason for doing so at least would have been to increase the speed of providing color corrected images to a user, as Engeldrum indicates in paragraph 192, lines 1-7.

***Conclusion and Contact Information***

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Sakashita et al. (US 5,548,708) -- discloses displaying a low-resolution image for editing, storing the editing steps, which are later applied to the original image [Figs. 6 & 7]
- Dekel et al. (US 2002/0159653) – discloses transmitting only region of interest upon request

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

34. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yubin Hung whose telephone number is (571) 272-7451. The examiner can normally be reached on 7:30 - 4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



36. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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